UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,229	04/22/2004	Ho Seon Choi	0465-1134P	5949

2292 7590 03/24/2006

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
PHAM, MINH CHAU THI	
ART UNIT	**PAPER NUMBER**
1724	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/829,229	CHOI ET AL.	
	Examiner	Art Unit	
	Minh-Chau T. Pham	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/9/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of Kiser (4,850,264), the Great Britain Patent (GB 2,254,447 A) and Demeter et al (4,872,397).

Kiser teaches a confined space such as a building (19) essentially an enclosed system or a box-like housing (38 in Fig. 4) of generally rectangular configuration having inlet openings (40, 41, 44, col. 6, line 43-50), air filters (col. 7, lines 9-11), a fan (52) located in the housing, pressure sensors (24 a-e), temperature sensors (25 a-e), quality sensors (26 a-e) located in the housing as to sense the air quality of the room air drawn through the inlet (40, 41 and 44), a supplier assembly located inside the housing such as unit heat exchangers (not shown) installed in the housing for providing cooled air to the housing interior (col. 7, lines 12-16) or an air quality sensor (26) detecting the presence and amount of any of various gases or particulates in the air such as oxygen content or content of noxious gases, smoke, haze or airborne particulates (col. 9, lines 31-43), and a controller (23) for controlling the supplier assembly (Abstract, col. 2, lines 28-61, col. 5, lines 1-30, col. 8, lines 13-29, col. 9, lines 40-66).

The Great Britain reference teaches an interior atmosphere control system wherein the system contains a group of sensing devices (equivalent to the sensor

assembly) which consists of sensors (11, 12) detecting and measuring the value of indoor/outdoor air temperature, humidity, pressure, oxygen content, carbon dioxide content, and all the sensed signals are fetched by a microcomputer (equivalent to the controller), and the microcomputer measures/detects the sensed values of the sensing devices based on the pre-stored program and data in a memory unit and output adequate control signals to actuate a series of actuation devices (equivalent to the supplier assembly) to modulate the parameters mentioned above. The system includes a housing, each opening of inlet/outlet air having a filter (F) to filter out dirt in the air, fans (F1, F2) discharging the introduced indoor air after air is purified (line 3, page 7 to line 22, page 13, Figure 1), a group of sensors (11, 12, page 7, lines 4-17), a supplier assembly including a humidifier (54), an oxygen supply device (55), heat exchanger (E1), an odor supply device (56), an ion generator (57), a magnetic field regulator (58), light regulator (59), an electric charge generator (57), an odor supply device (56), and a controller via microcomputer (3) for controlling the supplier assembly (page 9, line 16 through page 11, line 24).

Demeter et al (4,872,397) teach an environmental module (10) having a housing (30) with air inlets (40, 42), air outlets (52, 54), fans (45, 46) mounted in the housing, a filter (48), (see col. 2, line 64 through col. 3, line 15, col. 3, line 57 through col. 4, line 14), a supplier assembly such as potentiometers (72, 74, 76, 78 and 80), and a controller (28) for controlling the noise generator, lights, radiant heat panel, temperature and air flow, respectively (Abstract, col. 2, lines 5-8, col. 4, lines 5-14, col. 4, lines 36-55, col. 5, lines 5-13 and lines 34-55).

Regarding to various contaminants such as "oxygen, anion, terpene", it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See *Ex parte Masham, 2 USPQ 2d 1647 (1987)*.

Response to Amendment

Applicant's arguments filed on January 13, 2006 have been fully considered but they are not persuasive.

Applicant argues that none of the cited prior arts discloses a combination of elements such as a fan, a sensor located in the cabinet to sense the composition of the room air drawn through the inlet, a supplier assembly and a controller for controlling the supplier assembly". The Examiner now drops all the cited references Guiles, Jr., Lohr et al and the Korean reference, and newly introduces Kiser (4,850,264), the Great Britain Patent (GB 2,254,447 A) and Demeter et al (4,872,397) as the primary references under the 102(b) rejections to show: Kiser teaches a confined space such as a building (19) essentially an enclosed system or a box-like housing (38 in Fig. 4) of generally rectangular configuration having inlet openings (40, 41, 44, col. 6, line 43-50), air filters (col. 7, lines 9-11), a fan (52) located in the housing, pressure sensors (24 a-e), temperature sensors (25 a-e), quality sensors (26 a-e) located in the housing as to sense the air quality of the room air drawn through the inlet (40, 41 and 44), a supplier assembly located inside the housing such as unit heat exchangers (not shown) installed in the housing for providing cooled air to the housing interior (col. 7, lines 12-16) or an

air quality sensor (26) detecting the presence and amount of any of various gases or particulates in the air such as oxygen content or content of noxious gases, smoke, haze or airborne particulates (col. 9, lines 31-43), and a controller (23) for controlling the supplier assembly (Abstract, col. 2, lines 28-61, col. 5, lines 1-30, col. 8, lines 13-29, col. 9, lines 40-66).

The Great Britain reference teaches an interior atmosphere control system wherein the system contains a group of sensing devices (equivalent to the sensor assembly) which consists of sensors (11, 12) detecting and measuring the value of indoor/outdoor air temperature, humidity, pressure, oxygen content, carbon dioxide content, and all the sensed signals are fetched by a microcomputer (equivalent to the controller), and the microcomputer measures/detects the sensed values of the sensing devices based on the pre-stored program and data in a memory unit and output adequate control signals to actuate a series of actuation devices (equivalent to the supplier assembly) to modulate the parameters mentioned above. The system includes a housing, each opening of inlet/outlet air having a filter (F) to filter out dirt in the air, fans (F1, F2) discharging the introduced indoor air after air is purified (line 3, page 7 to line 22, page 13, Figure 1), a group of sensors (11, 12, page 7, lines 4-17), a supplier assembly including a humidifier (54), an oxygen supply device (55), heat exchanger (E1), an odor supply device (56), an ion generator (57), a magnetic field regulator (58), light regulator (59), an electric charge generator (57), an odor supply device (56), and a controller via microcomputer (3) for controlling the supplier assembly (page 9, line 16 through page 11, line 24).

Demeter et al (4,872,397) teach an environmental module (10) having a housing (30) with air inlets (40, 42), air outlets (52, 54), fans (45, 46) mounted in the housing, a filter (48), (see col. 2, line 64 through col. 3, line 15, col. 3, line 57 through col. 4, line 14), a supplier assembly such as potentiometers (72, 74, 76, 78 and 80), and a controller (28) for controlling the noise generator, lights, radiant heat panel, temperature and air flow, respectively (Abstract, col. 2, lines 5-8, col. 4, lines 5-14, col. 4, lines 36-55, col. 5, lines 5-13 and lines 34-55).

Regarding to various contaminants such as "oxygen, anion, terpene", it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See *Ex parte Masham, 2 USPQ 2d 1647 (1987)*.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Minh-Chau Pham
Patent Examiner
Art Unit: 1724
March 21, 2006